

CLAIMS:

1. Claim 1 is an optical disk determination circuit that determines the kind of optical disk by detecting the distance from the light beam irradiation plane to the data recording layer, comprising:

5 an input terminal that inputs received light signals, which correspond to the reflected light of a light beam, while the focal position changes in the depth direction of an optical disk;

a clamp circuit that clamps the bottom level of the aforementioned received light signals at a specified level, and outputs this as a bottom level clamp signal;

10 a comparator circuit that detects a first reflection signal at the surface of the optical disk, and a second reflection signal at the recording layer of the optical disk by comparing the aforementioned bottom level clamp signal with a reference voltage; and

15 a calculation circuit that calculates the distance from the surface of the optical disk to the recording layer using the time difference between the aforementioned first reflection signal and the aforementioned second reflection signal.

2. An optical disk determination circuit described in Claim 1, having:

a filter circuit that conducts specified signal processing in relation to the signals input from the aforementioned input terminal; and

20 an amplifier circuit that amplifies the output signals of the aforementioned filter circuit and outputs them to the aforementioned clamp circuit.

3. An optical disk determination circuit described in Claim 2, having:

25 a filter circuit that conducts specified signal processing on the output signals of the aforementioned clamp circuit.

4. An optical disk determination circuit described in any of Claims 1 that determines whether an optical disk is a CD or a DVD corresponding to the distance from the surface of the optical disk to the recording layer.